**Tool 2(cycle).13.** Combining Your Own Implementation and Formative Data (p. 1 of 3)

# **Combining Your Own Implementation and Formative Data**

## Questions to Ask Of Implementation/Student Growth Data

Combining teacher implementation data (what instructional program have students actually experienced?) with student learning data (results from formative measures as well as ITBS and ITED) allows you to answer your most pressing question: Is this working?

Questions frequently asked of these data include:

- ☐ How often did our students experience the content of our professional development program? Was it more or less often than recommended by research on our content?
- □ Do we have a good fidelity measure? E.g., did we implement our new content accurately or did we return to traditional practices, calling them by a new name?
- □ Did our students grow as anticipated during the period of our implementation of our new content? Did all students grow equally, or did our new content work better for some groups of students?
- □ Did all teachers implement equally, or did some teachers implement the new content more frequently and accurately than others? If yes, did student learning vary systematically by teacher implementation?

You may have other questions you wish to answer as you analyze these data.

#### **Tool 2(cycle).13.** Combining Your Own Implementation and Formative Data (p. 2 of 3)

### **How to Create Implementation Scores**

Implementation data attempt to say something about fidelity to intentions when innovations are being learned and used in classrooms. Generally, these data attempt to measure both frequency and quality of implementation. When combined with student learning data, they help the Professional Development Leadership Team and collaborative teacher teams triangulate data to determine additional training and support needed. These two pages provide an example of how one school developed a system to analyze data.

The Coastal Unified School District combined three sources of information to derive implementation scores:

Observations
Document Analysis
Minutes from Collaborative Team Meetings

- Observations: The CUSD reading coordinators systematically visited Second Chance Reading Classrooms. During their observations they recorded on a checklist the room setup, teacher activities, and student activities. They then rated, on a scale of 1-5, the accuracy of the strategies observed.
  - (Observations could also be conducted by principals and assistant principals, department chairs, curriculum directors, or anyone knowledgeable about the content being implemented.)
- II. Document Analysis: Three weeks of lesson plans (for each nine-week period) were analyzed for each teacher to determine with what frequency they used various program elements. Sample lessons were attached to the plans in an attempt to determine quality of lessons. Teachers were then ranked from top to bottom on fidelity to the model (Second Chance Reading).
  - (Documents generated by monitoring an implementation will vary widely, depending on the content of professional development and the nature of the implementation plan.)
- III. Minutes from Collaborative Team Meetings: Collaborative teams kept simple minutes of their meetings, reporting the content of their sessions (lesson planning and development, sharing of problems and solutions, study of student data, etc.) Some teams met weekly (or even more frequently) and others met irregularly.

These three sources of data were combined into a single **score** for each teacher: a score of one for low implementation to a score of three for high implementation.

#### **Tools and Resources**

#### Tool 2(cycle).13. Combining Your Own Implementation and Formative Data (p. 3 of 3)

#### **Combining Implementation/Student Growth Data**

In order to evaluate the effectiveness of a program and make decisions about whether to continue the program or try an alternative, it is critical to examine program effects by teacher implementation. In the example above, each teacher kept a spreadsheet for their students, recording attendance, test scores, books read, fluency and comprehension scores, etc. as well as demographic data for each student. When these spreadsheets were combined into a school or district data base, the final column was the implementation score.

Sample questions to ask of your combined data are:	
Q1:	What is the correlation of teacher implementation with student growth in total reading? In vocabulary? In comprehension?
Q2:	What was the mean student growth of teachers at various levels of implementation?
Q3:	What were the mean numbers of books read and vocabulary learned by levels of teacher implementation?
Are there other questions you want to ask of these data?	
an if i	every school, for various reasons, there are variations in the implementation of the curricular and instructional changes you plan. Discuss with your group ways to address these changes to appears that the program/strategies you are learning in your professional development organ truly benefit students when they are fully implemented.